Application No.: 10/525,818 Docket No.: 0171-1184PUS1

AMENDMENTS TO THE CLAIMS

(Original) A nonaqueous electrolyte characterized by containing:

 an ionic liquid having general formula (1) below formula (2) below and a melting point
 not higher than 50°C

$$\begin{bmatrix}
R^1 \\
R^2 & X & R^3
\end{bmatrix} + Y \qquad (1)$$

$$\begin{bmatrix} Me \\ Et - X - CH_2CH_2OR' \\ Et \end{bmatrix}^+ \cdot Y$$
 (2)

wherein R^4 are each independently an alkyl group of 1 to 5 carbons or an alkoxyalkyl group of the formula R' O $(CH_2)_n$ (R' being R' is methyl or ethyl, and the letter n being an integer from 1 to 4), and any two from among R^4 , R^2 , R^3 and R^4 may together form a ring, with the proviso that at least one of R^4 to R^4 is an alkoxyalkyl-group of the above formula,

X is a nitrogen atom or a phosphorus atom, and

Y is a monovalent anion, Me stands for methyl and Et stands for ethyl;

a compound which reductively decomposes at a more noble potential than the ionic liquid; and

a lithium salt.

2. (Original) The nonaqueous electrolyte of claim 1 which is characterized in that the compound reductively decomposes at a more noble potential than the ionic liquid when a working electrode used with the electrolyte is made of a carbonaceous material or metallic lithium.

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3. (Original) The nonaqueous electrolyte of claim 1 or 2 which is characterized in that the content of said compound within the electrolyte is from 0.1 to 60 wt%.

- 4. (Original) The nonaqueous electrolyte of claim 3 which is characterized in that the content of said compound is 0.1 to 30 wt%.
- 5. (Previously presented) The nonaqueous electrolyte of claim 1 which is characterized in that the compound is one or more selected from among ethylene carbonate, propylene carbonate, vinylene carbonate, dimethyl carbonate, ethyl methyl carbonate and diethyl carbonate.
- 6. (Previously presented) The nonaqueous electrolyte of claim 1 which is characterized in that the ionic liquid has a melting point not higher than 25°C.
- 7. (Previously presented) The nonaqueous electrolyte of claim 1 which is characterized in that X is a nitrogen atom, R' is methyl, and the letter n is 2.
- 8. (Canceled)
- 9. (Previously presented) The nonaqueous electrolyte of claim 1 which is characterized in that Y is BF₄, PF₆, (CF₃SO₂)₂N, CF₃SO₃ or CF₃CO₂.
- 10. (Previously presented) The nonaqueous electrolyte of claim 1 which is characterized in that the lithium salt is LiBF₄, LiPF₆, Li(CF₃SO₂)₂N, LiCF₃SO₃ or LiCF₃CO₂.
- 11. (Previously presented) A nonaqueous electrolyte secondary cell having a positive electrode which contains a lithium-containing double oxide, a negative electrode which contains a carbonaceous material capable of inserting and extracting lithium ions or contains metallic lithium, a separator between the positive and negative electrodes, and a nonaqueous electrolyte;

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which secondary cell is characterized in that the nonaqueous electrolyte is a nonaqueous electrolyte according claim 1.

- 12. (Previously presented) The nonaqueous electrolyte secondary cell of claim 11 which is characterized in that the separator is a porous film or porous sheet having a thickness of 20 to 50 μ m and a porosity of 25 to 85%.
- 13. (Original) The nonaqueous electrolyte secondary cell of claim 12 which is characterized in that the porous film or porous sheet is composed primarily of cellulose.